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Supplement 134

A Revised Check List of the Parasitic Fungi on Cereals and Other Grasses in Oregon

March 1, 1942



The Plant Disease Reporter is issued as a service to plant pathologists throughout the United States. It contains reports, summaries, observations, and comments submitted voluntarily by qualified observers. These reports often are in the form of suggestions, queries, and opinions, frequently purely tentative, offered for consideration or discussion rather than as matters of established fact. In accepting and publishing this material the Division of Mycology and Disease Survey serves merely as an informational clearing house. It does not assume responsibility for the subject matter.

A REVISED CHECK LIST OF THE PARASITIC FUNGI ON CEREALS AND OTHER GRASSES IN OREGON !-

Roderick Sprague2/

Plant Disease Reporter Supplement 134

March 1, 1942

The first preliminary list of the diseases of cereals and grasses in Oregon²/was issued in 1935 and additions⁴/were added in 1937. These two lists are here combined together with further additions.

Oregon is well adapted to the growing of both cereals and grasses. The State is roughly divided by the Cascade Range into the humid western portion and the drier, semi-arid eastern region. The western portion is again partitioned into a narrow, very humid coastal strip flanked by the low Coast Range dividing the coast area from the wide Willamette Valley where winter rainfall is heavy and summer weather dry. Northward the Willamette drains into the Columbia River which breaks through the Cascade Range from the east. South of the Willamette Valley is a rugged area of valleys and hills extending to the Siskiyou Mountains on the California border. Eastern Oregon is a high plateau of sagebrush and grassland, with the eastern portion featured by the conifer-covered Blue Mountains and granitic Wallowa Mountains. Wheat is extensively grown in central Oregon, and in the vicinity of the Blue Mountains in Union and Umatilla Counties it is the major crop.

Diseases of grasses in Oregon are found throughout the State, but the most serious troubles occur in the humid coastal strip or, during the mild winter months, in the Willamette Valley. The native dry land bluegrasses and bunchgrasses are parasitized by a number of fungi, but the dry season which comes after the spring rains cease is, in general, unfavorable for the development of grass diseases in the interior country. Certain rusts, smuts, rootrots, and powdery mildews, however, are sometimes abundant.

This list is for the purpose of furnishing a ready reference to all known diseases of cereals or grasses in Oregon. During recent years there has been increasing interest in the long-neglected group of grass diseases. While it is realized that many of the fungi listed in this article cannot, from a practical standpoint, be considered in a control program, it is

^{1/} Cooperative investigations between the Divisions of Cereal Crops and Diseases and Forage Crops and Diseases, Bureau of Plant Industry, U. S. Department of Agriculture, and the Oregon Agricultural Experiment Station, contribution from the Department of Botany.

^{2/} Associate Pathologist, Division of Gereal Crops and Diseases, Bureau of Plant Industry, U. S. Department of Agriculture.

^{2/} A preliminary check list of the parasitic fungi on cereals and other grasses in Oregon. Plant Disease Reporter 19:156-186. 1935.

^{4/} Additions to the check list of the parasitic fungi on cereals and other grasses in Oregon (1935-37). Plant Disease Reporter 21:412-422. 1937.

important that a relatively complete list be assembled. A great deal of study must eventually be made to determine their host range, ecology and, where destructive, their control. As mentioned above, the diseases of grasses in the western portion of Oregon, particularly those of bent grasses, need study as they are destructive.

The writer is indebted to all of his colleagues who aided in the earlier lists. C. R. Orton determined the species of Phyllachora. Several of the grasses collected recently were identified by Agnes Chase and others by Helen Gilkey and Garland Powell. George Fischer determined certain

species of smuts and rusts.

In citing authority for inclusion of the various fungi in this list, the writer wherever possible has again referred to representative collections in the Mycological Collections of the Department of Botany, Oregon State College, Corvallis, Oregon. Otherwise he has referred to specific references in reliable texts or, in a few cases, he has cited the fungi as having been seen and determined but collections not preserved. The collections at Corvallis now contain several thousand specimens of these fungi on Gramineae. A large number of duplicates have been sent to the Mycological Collections of the Bureau of Plant Industry, Washington, D.C., while representative collections also have been sent to Washington State College, Pullman, Washington, and to the University of Idaho, Moscow, Idaho.

The present list includes 677 citations of fungi on separate hosts. Hitchcock (5) was again followed in classification of the grasses and cereals. Varieties except in rare instances were not segregated and the polymorphic group Bromus carinatus, B. marginatus, and B. polyanthus has been included up ar the one name, B. carinatus.

LIST OF FUNGI BY HOST PLANTS

: Literature or specimen a/	(14)	(14)	(2)	(14) 10,210	8393 1C,495 \frac{c}{c}/ 7530 Fischer's Collections
Where found	Union County	Union County	/\q	Union County	Astoria in plots Astoria in plots Wasco County Wasco & Sherman Co. Moro Exp. Sta., Union
.sease Common name	JOINTED GOATGRASS Cercosporella foot rot	LITTLE GCATGRASS Cercosporella foot rot	Leaf rust	BARBED GCATGRASS Gercosporella foot rot	CRESTED WHEATGRASS Ergot Head mold Root rot Secondary pink root Stripe rust Stem smut
Host and fungus or disease Latin name Commo	AEGILOPS CYLINDRICA Host. Cercosporella herpotrichioides Fron	AEGILOPS CVATA L. Cercosporella herpotrichioides Fron	Puccinia rubigo-vera tritici (Eriks. & Henn.) Carl.	AEGILOPS TRIUNCIALIS L. Cercosporella herpotrichioides Fron	AGROPYRON CRISTATUM (L.) Gaertn. Claviceps purpurea (Fr.) Tul. Epicoccum purpurascens Ehrbg. Fusarium culmorum (W. G. Sm.)Sacc. F. oxysporum Schl. (Schm.) Eriks. & Henn. Ustilago hypodytes (Schl.) Fr.

Numbers in parentheses refer to literature citations at end of text; other numbers not in parentheses refer to specimen numbers in the mycological herbarium of the Department of Botany, Oregon State College, Corvallis, Oregon 19

Pure culture isolations made in Oregon by the writer, 1929-40. Information lacking. वार्ग

14					.4) <u>d</u> /
16,809 16,224 (2,7) (2,7) 16,054	673		10,928	c/ 1C,378	10,693 (W.A.F.,164) <u>d</u> , 10,692 10,695 527 Fischer's Col 10,117 10,752
Biggs, Celilo Wasco & Sherman Co. Sherman County Redmond, Celilo Wasco County Jackson, Sherman and Wasco Counties	Celilo Falls		Rufus Klamath Falls & Rowena	Rowena	Union Andrews Union Union Unper Klamath Warsh Exp. Sta., Union Corvallis Hood River Alsea Valley
THICKSPIKE WHEATGRASS (Downy wheatgrass) Mold Powdery mildew Stem rust Leaf rust Leaf scald Leaf stripe	Selenophoma specile	BEARDLESS WHEATGRASS	Powdery mildew Leaf strive	Leaf mottle	Ergot Powdery mildew Stem rust Brown stripe rust Leaf stripe Stripe smut QUACKGRASS Leaf rot Ergot Brown leaf speckle
ACROPYRON DASYSTACHYUM (Hook.) Scribn. (A. lanceolatum Scribn. & Smith) Ascospora graminis Lind. Erysiphe graminis DC. Puccinia graminis Pers. P. rubigo-vera (DC.) Wint. Rhynchosporium secalis (Oud.) J.J. Davis Scolecotrichum graminis Fckl.	Selench oma donacis (Pass.) Sprague & Johnson var. stomaticola (Bauml.) Sprague & Johnson	AGROPYROW INERME (Scribn. & Smith) Rydb.	(A. spicatum inerme Scribn. & Smith) Erysiphe graminis DC. Scolecotrichum graminis Fckl.	Septoria elymi Ell. & Ev.	AGROPYRON TRACHYCAULUM (Link) Malte (A. tenerum Vəsey, A. pauciflorum (Schw.) Hitch.) Claviceps purpurea (Fr.) Tul. Erysiphe graminis DC. Puccinia graminis Pers. P. montenensis Ell. Scolecotrichum graminis Fckl. Ustilago striaeformis (Westd.) Niessl AGROPYRON REPENS (L.) Beauv. Bacterium sp. Claviceps purpurea (Fr.) Tul. Claviceps purpurea (Fr.) Tul.

Warrenton Corvallis Silver Creek Falls & 6 miles N. of Eugene 4.65		Upper Klamath Lake 10,057 Heppner 10,164	18 mi. east of Arling- ton	Friend 873 Fendleton Herb., Univ.	E.Oreg. (2, 7) Benton County (2, 7) Fossil 10.808	yon	Wasco County 27,001		Hood River 10,252	Silver Creek Park 330	Clatsop County 10,317 Astoria 10,735	Coast region 10,586
Leaf rust Leaf scald Leaf mottle &	Stem smut Ho	WESTERN WHEATGRASS Leaf stripe Stem smut	BLUE BUNCH WHEATGRASS Leaf mold to	Powdery mildew Fa	Patterson's rust E. Leaf rust Be	n leaf blotch	Smut Smut	BEARDED WHEATGRASS	Brown stripe rust Ho	BENT GRASS Crown rust	REDIOP Ergot Parasite on crown rust A	Red eye spot
Puccinia rubigo-vera (DC.) Wint. Rhynchosporium secalis (Oud.) J.J.Davis Septoria elymi Ell. & Ev.	Ustilago hypodytes (Schl.) Fr.	GROPYRON SMITHII Rydb. Scolecotrichum graminis Fckl. Ustilago hypodytes (Schl.) Fr.	GRCPYRON SPICATUM (Pursh.) Scribn. & Smith Cladosporium herbarum Lk.	Erysiphe graminis DC. Puccinia glumarum (Schm.) Eriks. & Henn.	P. pattersoniana Arth. P. rubigo-vera (DC.) Wint.	Septoria infuscans (Ell. &Ev.) Sprague	U	GROPYRON SUBSECUNDUM (Link) Hitchc.	(A. Cantinum Amia Auciia) Puccinia montanensis Ellis	GROSTIS AEQUIVALVIS (Trin.) Trin. Puccinia coronata Corda	GROSTIS ALBA L. Claviceps purpurea (Fr.) Tul. Darluca filum (Biv.) Cast.	Mastigosporium rubricosum (Dearn. & Barum.) Sprague

Phycomycete Indet. e/ Puccinia coronata Corda F. graminis Pers. Rhizoctonia solani Kühn Rhynchosporium orthosporum Caldwell R. secalis (Oud.) J.J.Davis Septoria triseti Speg.	Purple leaf speckle Crown rust Stem rust Leaf rot Leaf scald Gray leaf speckle	Corvallis, Wells W. Oregon Astoria Corvallis Corvallis Granger Shedd, Corvallis	(2, 7) o 10,313 c/798 10,344 (Culture S 113);
Uromyces jacksonii Arth. &Fromme Ustilago striaeformis (Westd.) Niessl	Jackson's rust Stripe smut	W. Oreg. Monroe, Wells (near)	(2) 10,719
AGROSTIS CANINA L. Mastigosporium Jubricosum (Dearn. & Barth.) Sprague Phycomycete Indet. e/ Puccinia coronata Corda Puccinis agrostidis Eriks.	VELVET BENT Red eye spot Purple leaf speckle Crown rust Stem rust	Astoria in plots Astoria in plots Astoria in plots	10,980 119 10,713 10,713
AGRESTIS CASTELLANA Boiss. & Reut. Puccinia coronata Corda Scolecotrichum graminis Fckl. Septoria triseti Speg.	BENT Crown rust Leaf stripe Gray leaf speckle	Corvallis Corvallis	H.A. Rampton H.A. Rampton H.A. Rampton
AGROSTIS DIEGOENSIS Vasey (A. foliosa Vasey) Puccinia coronata Corda Septoria calamagrostidis (Lib.) Sacc.	THINGRASS (Leafy bent) Grown rust Leaf spot	W. Oreg. Wehl Greek (Douglas County)	(2, 7)
AGROSTIS EXARATA Trin. Claviceps purpurea (Fr.) Tul. Claviceps purpurea (Fr.) Tul. Derluca filum (Biv.) Cast. Corda Erysiphe graninis DC. Erysiphe graninis DC. This is a unilocular body or cluster of bodies embedded in the large probably belong near the Chytridiales. Nothing is known of They probably belong as the denty are found empty. Deen seen to germinate although sometimes they are found empty.	SPIKE REDTOP Ergot on Puccinia coronat Corda Powdery mildew les embedded in the le Nothing is known of ney are found empty. Leaves will be found	Warrenton 10,314 Clifton Marion County 10,507 Marion Been able to identify them their life history as the bodies have not at times they are very common during moist infected on a plant.	10,314 10,712 10,507 to identify them. bodies have not mon during moist

Helminthosporium triseptatum Drechsl. Hendersonia sp.	Leaf spot Leaf spot	Wells, Benton Co. Clifton	737
Mastigosportum rubricosum (pearm. & parum.) Sprague	Red eye spot	Hanchet Creek,	745
Phycomycete Indet. e/ Puccinia coronata Corda P. graminis Pers. Scolecotrichum graminis Fckl.	Purple leaf speckle Crown rust Stem rust Leaf stripe		(2, 7) (2, 7) (2, 7)
Septoria calamagrostidis (Lib.) Sacc. Ustilago striaeformis (Westd.) Niessl.	Leaf spot Stripe smut	Marion & Lincoln Cos. Benten & Jackson Cos.	
GROSTIS EXARATA var. AMPLA (Hitchc.) Hitchc. Septonia triseti Speg.	GIANT SPIKE REDTOP Gray leaf speckle	Lewisburg, Benton Co. 647	249
AGROSTIS HALLII Vasey Phyconycete Indet. e/ Rhizoctonia solani Kühn Sqolecotrichum graminis Fckl. Septogloeum oxysporum Bomm.,Rouss. & Sacc. Septoria sp. Uromyces jacksonii Arth. & Fromme	WILD BENT Purple leaf speckle Leaf rot Leaf stripe Char spot Leaf spot Jackson's rust	1 mi. west of Summit Benton County Helmick Park Corvallis Helmick Park Benton County	91 84.89 8370 8278 8370 (2, 7)
AGROSTIS SCABRA Willd. Scolecotrichum graminis Fckl. Septogloeum oxysporum Bomm., Rouss. & Sacc.	TICKLEGRASS Leaf stripe Char spot	Upper Klamath Marsh Cornucopia	530: (Fischer)
AGROSTIS HOWELLII Scribn. Hendersonia culmicola var. minor Sacc.	HCWELL'S BENT Leaf & sheath rot	W. fork of Hood Riv.	408
AGROSTIS LONGILIGULA Hitchc. Puccinia coronata Corda	PACIFIC BENŤ Crown rust	Coast	(2, 7)
AGROSTIS PALLENS Trin. Uromyces jacksonii Arth. & Fromme	DUNE BENT (Seashore bent) Jackson's rust	Coast	(2)

AGROSTIS PALUSTRIS Huds. (A. maritima Lam.)	CREEPING BENT (Seaside bent)		`	
Claviceps purpurea (Fr.) Tul. Fusarium culmorum (W.G.Sm.) Sacc. F. nivale (Fr.) Ces. <u>f</u> /	Ergot Root rot Snow mold	~	16,316 16,447 10,447	
F. nivale (Fr.) Ces. var. majus V.r. Macrophoma sp. Wastigosporium rubricosum (Dearn. & Barth.)	Leaf spot	6 mi. S.of Newport 6 mi. S.of Newport	39	
Sprague	Red eye spot	Coast region, Willamette Valley	10,308	
Ovularia pulchella (Ces.) Sacc. ar. (?) Phycomycete Indet. e/	Tan leaf spot Purple leaf speckle	Corvallis, Summit	10,131	
Puccinia coronata Corda	Crown rust Secondary root rot	W. Oreg. Corvallis	(7) 10.447	
Millactions solutions rain (Lib.) Sacc.	Leaf spot	W. Oreg.	<u>c</u> / 8490	
Phaecseptoria sp.	spot	6 mi. S.of Newport	39	
Septoria triseti Speg. minatis ochnida Risch	uray leaf speckle Head smit	Near Newport Coast	10 8303	
	Jackson's rust	Hood River	(7)	
	Stripe snut	Near Salem	, 129	
AGROSTIS STOLONIFERA L.	BENT			
Mastigosporium rubricosum (Dearn. & barum.) Sprague	Red eye spot	Astoria in plots	8263	
Chostis Thuls Sibth (Fr.) Tul.	CCLONIAL BENT (Astoria bent) Ergot	oent) Astoria	10,029	
	Brown petch On Puccinia coronata	W. Oreg. Astoria, Hebo	2/747	
Fuserium cainorum (v.G.Sm.) Sacc. Fuserium (v.) Coa	Ecot rot Snow mold	W. Orag. Corvallis	c/ 10,747	
F. CZTEPOTUR COLL.	Secondary root rot Leaf blight	Corvallis Corvallis	10,747	
Mastifocoprium rubricosum (Doarn. & Barth.)				
Sprague	Red oye spot	Coast region, Willamette Valley	10,585	

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The cause of the winter "snow meld" of grasses is greatly in need of study both from a centrol and taxonomic standpoint.

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Phycomycete Indet. e/	Purple leaf speckle	te Valley, gion	107;49;156
Puccinia coronata Corda P. graminis Pers. Robillarda agrostidis Språgue Septoria triseti Spėg. Ustilago striaeformis (Westd.) Niessl.	Crown rust Stem rust Leaf rot Gray leaf speckle Stripe smut		10,734 10,052 42 10,483 18
GRCSTIS VERTICILLATA Vill. Erysiphe graminis DC. Mastigosporium rubricosum (Dearn. & Barth.)		Sherman County	10, 287
Sprague	Red eye spot	Astoria	8262
IRA (See DESCHAMPSIA)			-
LOPECURUS AEQUALIS Sobol.	SHORTAWN FOXTAIL (Little meadow foxtail)		
Scolecotrichum graminis Fckl.	Leaf stripe	Upper Klamath Lake	10,058
ALOPECURUS GENICULATUS L. Scolecotrichum graminis Fckl.	WATER FOXTAIL Leaf stripe	Crater Nat'l Forest	518
ALOPECURUS PRATENSIS L. Claviceps purpurea (Fr.) Tul. Puccinia coronata Corda P. graminis Pers.	MEADOW FOXTÁIL Ergot Crown rust Stem rust		10,705
Rhynchosporium sp. Scolecotrichum graminis Fckl.	Leaf scald Leaf stripe	Corvallis Corvallis	10,275
ALOFECURUS SACCATUS Vasey Puccinia graminis Pers.	PACIFIC MEADOW FOXTAIL	Corvallis	(2, 7)
AMMOPHILA ARENARIA (L.) Link Cjadosporium sp.	EUROPEAN BEACHGRASS Leaf mold	Lake Lytle	8386

945	8264	10,265	105 264	21, 25,979 8433, 10,293	c/ 10,136 1813		10,436	10,243	c/ 7212 c/ 8308 c/ 10,115	10,112	8266 (12)
Near Seaside (F.D. Bailey)	Tillamook and Multnomah Cos.	Corvallis & coast region	10 mi. S. of Seaside Triangle Lake	Corvallis Corvallis Benneville Astoris in plots Western Oregon	Astoria General		Myrtle Point	Troutdale Scattered in coast region	W.Oreg. & Moro Mcro, western Oreg. Astoria Coast	Lincoln County Curry & Marion Cos.	Astoria, Willamette Valley
SWEET VERNALGRASS Leaf mold	Ánthracnose	Leaf spot	Leaf spot Leaf blotch	TALL CATGRASS Purple leaf speckle Ergot Leaf spot Stem rust	Char spot Head smut		SLENDER WILD OAT Stem rust	RED OAT White leaf spot Powdery mildew	Root rot Secondary root rot Head blast	Root rot Take-all	Red leather leaf
ANTHOXANTHUM ODORATUM L. Cladosporium herbarum Lk.	Colletotrichum graminicolum (Ces.) Wils.	Helminthosporium dematioideum Bubak & Wrob.	Phycomycete Indet.e/ Phyllosticta anthoxanthella Sprague	ARRHENATHERUM ELATIUS (!.) Mert. & Koch. Ascochyta graminicola 1200. Clavicaps purpurea (Fr.) Tul. Ovularia pulchella (C.:.) Sacc. Puccinia graminis Pers. Scolecotrichum graminis Fckl.	Septogloeum oxysporum Bomme, Rouss. & Sacc.	Ustilago peremians noso .	AVENA BARBATA Brot. Puccinia graminis avenae Eriks. & Henn.	AVENA BYZANTINA C. Koch Ascochyta sp. Erysiphe graminis DC.	Fusarium culmorum (M.G.Sm.) Sacc. F. oxysporum Schl. F. poae (Pk.) Wr.	Helminthopporium avenae Eldam H. sativum P.K.& B.	Ophiobolus greminis bacc. Pseudodiscosia avenae Sprague & Johnson

E/ (10) 10,032 (9) 1820 1320	1101 48 e/ 7537 (2, 7) 10,477	10,031 10,718 10,718	(A.G. Johnson (14) 5196 10,158 7532 (8) 10,355 c/10,116 10,452 10,452 10,460 (12) 10,045
Coast W. Cregon Lincoln & Lane Cos. W. Oregon Scattered	Corvallis, Mosier Linn County W. Oregon Lincoln County Willamette Lincoln County	Cocs Counties Astoria in plots Astoria in plots	Corvallis Wasco County Lincoln County Scattered Willamette Valley W.Oreg. & Woro Hood River, Astoria, and Warrenton W. Oregon Lincoln County Forest Grove Marion County
Crown rust Stem rust White foot rot Leaf blotch Loose smut	WILD OAT Powdery mildew Root rot Leaf spot Crown rust Stem rust White foot rit	NAKED OATS Crown rust Stem rust	Bacterial stripe blight Foot rot Anthracrose Powdery mildew on Puccinia graminis Rot rot Head blast Leaf spot Root rot Root rot Reot rot Reot rot Reot rot Reot rot Reot rot
Puccinia coronata Corda P. graminis Pers. Rhizoctonia solani Kühn Septoria tritici Rob.f.avenae (Desm.)Sprague Ustilago avenae (Corda) Jens. Ustilago kolleri Wille (U.levis (Kell & Sw.) Magn.)	AVENA FATUA L. Erysiphe graminis DC. Fusarium culmorum (W.G.Sm.) Sacc. Helminthosporium avenae Eidam Puccinia coronata Corda P. graminis Pers. Rhizoctonia solani Kühn Septoria tritici Rob. f. avenae (Desm.)	AVENA NUDA L. Puccinia coronata Corda P. graminis avenae Erikš. & Henn.	AVENA SATIVA L. Bacterium striafaciens Elliott [Phytcmonas s. Bergey et al.] Cercosporella herpotrichioides Fron Colletotrichum graminicolum (Ces.) Wils. Erysiphe graminis DC. Darluca filum (Biv.) Cast. Fusarium culmorum (W.G.Sm.) Sacc. F. poae' (Pk.) Wr. Helminthosporium avenae Eidam . Heterosporium avenae Oud. Ophiobolus graminis Sacc. Pseudodiscosia avenae Sprague & Johnson

$\begin{pmatrix} 2, 7 \\ (2, 7) \\ (10) & \underline{c} \end{pmatrix}$	(9) 1C,035 1064	3821 (11) <u>c</u> /	10,628		(2, 7) 10,060 (2, 7)	Co.)1C,085	10,200	10,592	10,245 790 10,221 1558-A	Univ. of Idaho Herb.	(2, 7)	
W. Oreg. W. Oreg. Lincoln & Lane Cos.	W. Oregon Scattered	General Wasco, Union, & Umatilla Counties	Corvallis		Corvallis W. Cregon W. Cregon	Tygh Ridge (Wasco Co.	Hood River, Whitson	Corvallis S. Benton County	Hood River Corvallis Wasco & Benton Cos. Mt. Hood	Medford, Corvellis	General	
Crown rust Stem rust White foot rot	Leaf blotch Loose smut	Covered smut Secondary root rot	Leaf mold	AMERICAN SLOUGHGRASS	Stem rust Leaf stripe Rust	AUSTRALIAN CHESS Leaf stripe	CALIFORNIA BROME Leaf spot	Chocolate spot Ergot	Leaf rot Parasite on leaf rust Powdery mildew Leaf rot Prunie leaf tot		Leaf rust	. od
	Septoria tritici Kob. f. avenae (Desm.) Sprague Ustilago avenae (Corda) Jens.	<u>ب</u> چ	B. ROO (GENUS INDET.) ycosphaerella tulasnei Jacz.	BECEMANNIA SYZIGACHNE (Steud.) Fern.	(s. erucaelormis Am. Auth.) Puccinia greminis Pers. Scolecotrichum graminis Fckl. Uromyces becknanniae Jacks.	BRCMUS AREWARIUS Labill. Scolecotrichum graminis Fckl.	BROMUS CARINATUS Hook. & Arn.h/ Ascochyta graminicola Sacc. var. diedickeana Baudys & Picb. 'Bacterium coronafaciens atropurpureum	(Reddy & Godkin [Phytomonas c. atropurpurea; Magrou] Claviceps purnurea (Fr.) Tul.	Corticium solani (Frill. & Del.) bourd. & Galz. (Rhizoctonia solani Kühn) Darluca filum (Biv.) Cast. Erysiphe graminis DC. Heterosporium sp.	Fnycomycete Indeter	P. rubigo-vera (DC.) Wint.	h/ Includes B. marginatus and B. polyanthus.

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	Scolecotrichum graminis Fckl.	Septoria jacucella Sprague	Ustilago bullata Berk.

Ustilago bullata Berk. BROMUS CATHARTICUS Vahl. (B. unioloides H.B.K.) Puccinia rubigo-vera (

Puccinia rubigo-vera (DC.) Wint. Darluca filum (Biv.) Cast. BROMUS COMMUTATUS Schrad. Septoria bromi Sacc.

Ustilago bullata Berk.

Bacterium coronafaciens atropurpureum Reddy & Godkin [Phytomonas] BROMUS ERECTUS Huds.

Puccinia rubigo-vera (DC.) Wint. BROMUS GRANDIS (Shear) Hitchc.

Scolecotrichum graminis Fckl. Ustilago bullata Berk. BROMUS INERMIS Leyss.

SMOOTH BROME

Puccinia rubigo-vera (DC.)'Wint. (B. hordeaceus Am. Auth.) Tilletia guyotiana Har. Ustilagó bullata Berk. Septoria bromi Sacc. BROWUS MOLLIS L.

Scolecotrichum graminis Fckl. Cphiobolus graminis Sacc. BROWUS ORCUTTIANUS Vasey

10,061 10,372 10,521	10,105	10,394	1200
General General Scattered	Corvallis Astoria in plots	Corvallis W. Oregon Gen. in Willamette Valley	General
Leaf stripe Western leaf spot Brome smut RESCUE GRASS	Leaf rust Brome smut HAIRY CHESS	on Puccinia rubigo-vera Leaf rust Leaf spot	Brome smut ERECT BROWE

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Leaf stripe	Grant County	10,104
Brome smut	1 1 1	(1)
, ;		
SOFT CHESS		· · · · · · · · · · · · · · · · · · ·
(Soft cheat)		American Strong 1 Strong 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Léaf: rust,	W. Oregon	(2, 7)
Leaf spot	W. Oregon	10,995
Smut	5 mi. E. of Weston	Fischer
Brome smut	General	1814

0011.				13
(2,7) 10,995 Fischer's coll.	1814		7599	10,064
W. Oregon 5 mi. E. of Weston	General		Curry County	Siskiyou Mts.
Leaf rust. Leaf spot Smut	Brome smut	ORCUTT BROME	Take-all	Leaf stripe

BROMUS PACIFICUS Shear Puccinia rubigo-vera (DC.) Wint. Scolecotrichum graminis Fckl.	PACIFIC BROWE Leaf rust Leaf stripe:	S.fork of Alsea Riv. Corvallis	10,678
BROMUS RACEMOSUS L. Erysiphe graminis DC. Pụccinia rubigo-vera (DC.) Wint.	SMCOTH FLOWERED SOFT CHEAT Powdery mildew Leaf rust	Medford Hood River and Yamhill Counties	10,250
Sėptoria bromi Sacc. Ustilago bullata Berk.	Leaf spot Brome smut	Corvailis Blue Mts.	10,089
BROWNS RIGIDUS Roth.	RIPGUT GRASS		
Bacterium coronafaciens atropurpureum Reddy '& Godkin [Phytomonas] Cercospora bromi Sprague Puccinia rubigo-vera (DC.) Wint. Septoria jacucella Sprague	Chocolate spot Gray loaf spot Leaf rust Western leaf spot	Rufus Tumwater, Corvallis E. & S. Oregon 6 mi. N. of Eugene	10,950 10,405 (2, 7) 424
BROMUS SECALINUS L. Puccinia rubigo-vera (DC.) Wint. Septoria bromi Sacc. Ustilago bullata Berk.	CHESS (Cheat) Leaf rust Leaf spot Brome smut	W. Oregon Willamette Valley General	(2, 7) 10,402 <u>c</u> / 1821
BROMUS SECALINUS L. var. VULUTINUS (Schrad.)Koch Ustilago bullata Berk.	CHESS Brome smut	Corvallis	10,430
BROMUS SITCHFNSIS Trin. Puccinia glumarum (Schm.) Eriks. & Henn.	ALASKA BROME Stripe rust	Moro	Herb. Univ
P. rubigo-vera (DG.) Wint.	Leaf rust	\$ 6 u e	N .
BRCMUS STERILIS L. Erysiphe graminis DC.	BARREN CHEAT Powdery mildew	Corvallis	10,487
BROMUS TECTORUM L. Gercosporella herpotrichioides Fron. Fusarium culmorum (W.G.Sm.) Sacc.	DCWNY CHESS (downy brome) Cercosporella foot rot Root rot	Union & Wasco Cos. Wasco County	.ગગ

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		a
Wint.		Sacc.
Puccinia rubigo-vera (DC.)	Ustilago bullata Berk.	Wojnowicia graminis (McAlp.

BROMUS VULGARIS (Hook.) Shear Cercospora bromi Sprague

Darluca filum (Biv.) Cast.

Mastigosporium cylindricum. Sprague

Puccinia rubigo-vera (DC.) Wint.

CALAMAGROSTIS CANADENSIS (Michx.) Beauv. Urocystis agropyri (Preuss.), Schroet. Puccinia coronata Corda

CALAMAGROSTIS INEXPANSA A. Gray Puccinia coronata Corda CALAMAGROSTIS NUTKAENSIS (Presl.) Steud. Claviceps purpurea (Fr.) Tul.

Mycosphaerella tassiana (DeNot.) Johans. Septoria arctica Berk. & Curtis Darluca filum (Biv.) Cast. Conjothyrium psammae Oud. Puccinia coromata Corda P. pygmaea Eriks.

Colletrotrichum graminicolum (Ges.) Wils. CALAMAGROSTIS RUBESCENS Buckl. Cladosporium herbarum Lk.

PINEGRASS

Sorosporium syntherismae (Pk.) Farl. CENCHRUS PAUCIFICRUS Benth.

(2, 7)	10,290	ो			. 294		347		788	(2, 7)	
Columbia County	E. Oregon	Union County		Sourgrass Crk.,	Yamhill County	Near Pacific Grange,	Clatsop County	Wehl Creek Road,	Douglas County	W. Oregon	
Leaf rust	Brome smut,	Secondary root rot	NARROW FLOWERED BROME	Gray leaf spot		Parasite on leaf rust		Brown spot		Leaf rust	

reedgrass)	
spiked	Astoria
(Narrow	1
REEDGRASS (Na	, د <u>ب</u>
NORTHERN	Crown rus

(2, 7) (4) (W.A.F. 222) <u>d</u>/

Columbia County Mann's Lake

Crown rust

Smut

BLUEJOINT

Northern regulado (Nairow Spireu reegraso) Crown rust	w spikeu reeugrass/ Astoria	(2,
PACIFIC REEDGRASS		
Ergot	Delmoor Bog, Clatsop	
	County	703
Leaf spot	Taft, Waldport 10,	10,
on crown rust	Coast	10,
Leaf spot	Taft	10,
Crown rust	Coast	33
Rust	Newport	, 2,
Leaf blotch	Seaside, (Delmoor Bog)	709

325;33

Hermiston

Smut

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-11	r
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819	10,527,690	619	10,011 10,595 86 (2, 7) 10,124 7591	10,379 <u>c/</u>	8255 10,193	629	10,101	51	809
Bayview, Lincoln Co.	N.W. Oregon Greenhouse, OSC, Corvallis Columbia Gorge; Umatilla County	S. fork of Santiam Riv.	W. Oregon Waldport Wren W. Cregon Benton County	Troutdale Wallace Bridge	Willanette Valley Corvallis	Linn and Benton Cos. Benton, Marion, & Linn Counties	(Mountain oatgrass) Mt. Hood	Corvallis Near Granger, near	Near Granger Linn County
PAMPASGRASS Leaf spot	ORCHARD GRASS Ergot Anthracnose Powdery mildew	Culm canke ${f r}$	Purple leaf snot Leaf rot Red leaf speckle Stem rust Leaf scald Leaf stripe	Selenophoma speckle Purple blotch	VILD OATGRASS Speckled mold Leaf stripe	Catgrass eye spot Smut	TIMEER OATGRASS (Mou Leaf rot	TUFFED HAIRGRASS Leaf spot	Leaf rot ' Leaf stripe
CORTADERIA SELLOANA (Schult.) Aschers.& Graebn. Hendersonia culmiseda Sacc.	DACTYLIS GLOMERATA L. Claviceps purpurea (Fr.) Tul. Colletotrichum graminicolum (Ges.) Wils. Erysiphe graminis DC.	Fusarium avenaceum (Fr.) Sacc.	Mastigosporium rubricosum (Dearn. & Bartn.) S rague Phy. osticta owensii Sprague Phyconycete Indet. e/ Puccinia graminis Pers. Rhynchosporium orthosporum Caldwell	Selenophoma donacis var. stomaticola (Bauml.) Sprague & Johnson Stagonospora arenaria Sacc.	<pre>var. AMERICANA (S a Scribn.) parasite) nis Fckl.</pre>	Selencphoma donacis var. stomaticola (Bauml.) Sprague & Johnson Ustilago residua Clinton	DANTHONIA INTERMEDIA Vasey Pleospora sp.	DESCHAMPSIA CAESPITOSA (L.) Beauv. Hendersonia culmicola var. minor Sacc. Hendersonia sp.	Phaeoseptoria sp. Scolecotrichum graminis Fckl.

809	(2, 7)	10,068 c/8491 (4)	332 332 (2) (2)	g/ (2, 7) 3646	8374 (4) (WAF 212) <u>a</u> /	10,508	1804 <u>E</u> /	10,694 (W.A.F.163
Near Granger Corvallis	Lingoln County	Douglas County Benton County	Tillamook County Tillamook County	Baker and E. Oregon E. Oregon S. Oregon	Astoria S.E. Oregon	Biggs Umatilla & Sherman Cos. E. Oregon	E. Oregon Umatilla County	Union & Umatilla Cos. E. Oregon
Tan leaf spot Leaf rot	Jackson's Rust	Leaf stripe Tan leaf spot Smut	SLENDER HAIRGRASS Parasite on rust Parasite on rust Stem rust Jackson's rust	DESERT SALTGRASS Char spot Rust Sheath smut	BARNYARD GRASS Head mold Smut	SAND RYEGRASS Ergot California rust Leaf rust	CANADA WILD-RYE Ergot Leaf rust	GIANT WILD-RYE Ergot Powdery mildew
Septoria poliomela Syd. Stagonospora subseriata Sacc.	Uromyces jacksonii Arth. & Fromme .	Scolecotrichum graminis Fckl. Septoria poliomela Syd.	DESCHAMPSIA ELCNGATA (Hook.) Munro Darluca filum (Biv.) Cast. Fusarium avenaceum (Fr.) Sacc. Puccinia graminis Pers. Uromyces jacksonii Arth. & Fromne	DISTICHLIS STRICTA (Torr.) Rydb. Dothidella aristidae (S.) Ell. & Ev. Puccinia aristidae Tracy Ustilago hypodytes (Schl.) Fr.	ECHINOCHLOA GRUS-GALLI (L.). Beauv. (?) Epicoccum sp. Ustilago crus-galli Tracy & Earle	ELYMUS ARENICCLA Scribn. & Smith Claviceps purpurea (Fr.) Tul. Puccinia procera Diet. & Holw. P. rubigo-vera (DC.) Wint.	ELYMUS CANADENSIS L. Claviceps purpurea (Fr.) Tul. Puccinia rubigo-vera (DC) Wint.	ELYMUS CONDENSATUS Presl Claviceps purpurea (Fr.), Tul. Erysiphe graminis DC.

10,230 (6) Herb. Univ. of Idaho	0000	·	10,236 10,945 10,945 10,945 10,730 175 88 8448 (2, 7) (2,	.am River, 646	10,328
Sherman County Moro	Union County Fossil E. Oregon Sherman, Jefferson, Gilliam & Umatilla	Wasco County	Fall Creek Troutdale Benton County Linn County Bonneville Wren Benton & Crook Cos. W. Oregon Scapoose, Corvallis Linn Gounty Linn and Marion Cos. Benton County Crater Lake Linn County W. Oregon Crater Lake Linn County We oregon	S. fork Santiam River, Linn County	Warrenton
Leaf blight Stripe rust	Stem rust California rust Leaf rust Brown leaf blotch	Selenophoma speckle Stem smut	BLUE WILD RYE Leaf rot Leaf mold Ergot On Puccinia glumarum On rust Purple leaf speckle Powdery mildew Stripe rust Stem rust Leaf rust Leaf rot Leaf scald Leaf scald Leaf scald Leaf stripe Leaf stripe Leaf stripe Leaf stripe Leaf stripe Selenophoma speckle Purple leaf blotch Smut	HAIRY SEEDED WILD RYE Brown leaf speckle	AMERICAN DUNEGRASS Ergot Parasite on rust
Heterosporium avenae Oud. Puccinia glumarum (Schm.) Eriks. & Henn.	P. graminis Pers. P. procera Diet. & Holw. P. rubigo-vera (DC.) Wint. Septoria infuscans (Ell. & Ev.) Sprague	Selenophoma donacis (Pass.) Sprague & Johnson Ustilago hypodytes (Schl.) Fr.	ELYMUS GLAUCUS Buckl. ? Bacterium sp. Cladosporium herbarum (Pers.) Lk. Claviceps purpurea (Fr.) Tul. Darluca filum (Biv.) Cast. Fusarium avenaceum (Fr.) Sacc. Phycomycete Indet. e/ Phyllactinia corylea (Pers.) Karst. Procinia glumarum (Schum.) Eriks. & Henn. P. graminis Pers. P. rubigo-vera (DC.) Wint. Rhizoctonia solani Kühn Rhizoctonia solani Kühn Rhynchosporium secalis.(Oud.) J.J. Davis R. orthosporum Caldwell Scolecotrichum graminis Fckl. Septoria elymi Ell. & Ev. Septoria elymi Ell. & Ev. Selenophoma donacis (Pass.) Sprague & Johnson Stagonospora arenaria Sacc. Tilletia elymi Diet. & Holw.	ELYMUS HIRSUTUS Presl Helminthosporium tritici-repentis Died.	ELYMUS MOLLIS Trin. Claviceps purpurea (Fr.) Tul.

Parasite on rust

Darluca filum (Biv.) Cast.

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Puccinia rubigo-vera (DC.) Wint. Septoria pacifica Sprague Stagonospora subseriata Sacc. Tiarospora perforans (Rob.) Höhn.	Leaf rust Black stripe Leaf spot Leaf speckle	Coast Lincoln & Tillamook Cos. Wanhattan, Lake Lytle Tillamook County	10,329 10,376 707 10,958
ELYMUS TRITICOIDES Buckl. Claviceps purpurea (Fr.) Tul. Puccinia montanensis Ellis. P. rubigo-vera (DC) Wint. Septoria elymi-europaei Jaap S. infuscans (Ell. & Ev.) Sprague Scolecotrichum graminis Fckl.	BEARDLESS WILD-RYE (A Ergot Brown stripe rust Leaf rust Leaf speckle Brown leaf blotch Leaf stripe	(Alkali ryegrass) La Grande Talent Sherman County Klamath Falls Eastern Oregon Squaw Butte	10,689 10,635 (2,7) 10,380 10,380
ELYMUS VANCOUVERENSIS Vasey Puccinia rubigo-vera (DC.) Wint.	VANCOUVER DUNEGRASS Leaf rust	Astoria	Fischer's coll
FESTUCA DERTONENSIS (All.) Aschers. & Graben. Ophiobolus graminis Sacc. Phyllachora sylvatica Sacc. & Speg. Septoria tenella Cke. & Ell.	FFSCUE Take-all Tar spot Leaf spot	East Corvallis, Linn Co. S. fork Alsea River Roaring River, Linn Co.	. <u>E</u> / 322 186
FESTUCA IDAHOENSIS Elmer Puccinia crandallii Pam. & Hume	BLUEGRASS FESCUE (Idal Rust	(Idaho fescue) Blue Mts.	(2, 7)
FESTUCA ELATIOR L. Cladosporium herbarum (Pers.) Lk. Claviceps purpurea (Fr.) Tul. Puccinia coronata Cda. P. graminis Pers. P. poae-sudeticae (Westd.) Jørstad	MEADOW FESCUE Leaf mold Ergot Crown rust Stem rust Rust	Granger Astoria Lincoln County Benton and Lane Cos. W. Oregon	10,960 g/ (2,7) (2,7) (2,7)
FESTUCA WAIREI St. Yves Cladosporium herbarum (Pers.) Lk.	FESCUE Leaf mold	Granger	10,506
FESTUCA MEGALURA Nutt. Mycosphaerella sp. Ophiobolus graminis Sacc. Ovularia pulchella (Ces.) Sacc.	FOXTAIL FESCUE Blight Take-all Brown leaf spot	Benton County Linn and Benton Cos. Linn, Benton & Lincoln Cos.	10,818 B/ 10,271

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Phyllachora sylvatica Sacc. & Speg. Puccinia graminis Pers.	Tar spot Stem rust	Linn County Corvallis	10,491.
FESTUCA MYUROS L. Corticium fuciforme (McAlp.) Wak. Ophiobolus graninis Sacc. Ovularia pulchella (Ces.) Sacc. Puccinia graminis Pers.	RAT TAIL FESCUE Pink patch Take-all Brown leaf spot Stem rust	Bayview, Lincoln Co. Lincoln County W. Oregon Willamette Valley	823 B/ 10,125 . (2)
FYSTUCA CCTOFLORA Wal*. Rhizoctonia solani Lum Tilletia fusca Ell. & Ev. Ustilago mulfordiana Ell. & Ev.	SIXWEEKS FESCUE (sler Brown patch Smut Smut	(slender fescue) Bayview, Lincoln Co.	556 (4) (4)
FESTUCA OCCIDENTALIS Hook. Phyllachora sylvatica Sacc. & Speg.	WESTERN FESCUE Tar spot	Wenl Creek, Douglas Co. 479	. 479
FESTUCA PACIFICA Piper Puccinia graminis Pers. P. piperi Ricker	PACIFIC FESCUE Stem rust Piper's rust	Corvallis Eight Dollar Mt.	(2, 7)
Ustilago mulfordiana Ell. & Év.	Smut	Columbia R.	1371
FESTUGA RUBRA L. Ascochyta graminicola Sacc. var. brachypodii	RED FESCUE	ָרָ מַלְיָּרָ הַלְּיִרָּ בְּלִינִי	8377
Trail Cercosporella subulata Sprague Darluca filum (Biv.) Cast.	Eye spot on Rust	Halsey Garibaldi, Lake Lytle	
Hendersonia sp. Hendersonia culmicola var. minor Sacc. Mycosphaerella tulasnei Jacz. Phaeoseptoria sp.	Secondary leaf rot Leaf mold Leaf mold Secondary leaf rot	Garibaldi Near Newport Corvallis Garibaldi;King's	749 35 H.A.Rampton
Phyllachora sylvatica Sacc. & Speg.	Tar spot Rust	Valley Newport Union, Benton, Tillamock	8376 10,174 k 748
Septoria tenella Cke. & Ell.	Tan leaf spot	and Lincoln Cos. Corvallis	(2, 7) H.A. Rampton

FESTUCA RUBRA var. COMMUTATA Gaud. Cladosporium herbarum Lk. Corticium fuciforme (McAlp.) Wak.	CHEWINGS FESCUE Secondary seed mold Pink patch	Benton County Astoria, Portland, Corvallis	692
C. solani (Prill. & Del.) Bourd. & Galz. (Rhizoctonia solani Kühn) Fusarium sp. F. nivale (Fr.) Sor. Hendersonia sp.	Brown patch Scab Snow mold Leaf rot	Portland Astoria Portland Sulfur Springs Road, Benton County	E. 511 8315 E.410
Phycomycete e/ Septoria tenella Cke. & Ell.	Purple leaf speckle Tan leaf spot	Corvallis W. Oregon	59, 10, 582
FESTUCA SCARBRELLA Torr. Puccinia crandallii Pam. & Hume	ROUGH FESCUE (Buffalo bunchgrass) Rust E. Central O	o bunchgrass) E. Central Oregon	(7) 1424
FESTUCA SUBULATA Trin. Phyllosticta sp. Puccinia coronata Corda P. crandallii Pam. & Hume	BEARDED FESCUE (Nodd Leaf spot Crown rust Rust	(Nodding fescue) Silver Creek Falls Coast Range Ashland, Silver Creek Falls	270 (7) (2, 7)
FLUMINEA FESTUCACEA (Willd.) Hitchc. Ustilago arthuri Hume	FLUMINEA GRASS Smut		(7)
GASTRIDIUM VENTRICOSUM (Gouan) Schinz & Thell. Helminthosporium sp.	NIT-GRASS White leaf spot	S. Willamette Valley	B/.
GLYCERIA ILATA (Nash) Hitchc. Puccinia coronata Cda. Septoria nodorum Berk. Ustilago longissima (Sow.) Tul.	TALL MANNAGRASS Crown rust Leaf spot Smut	Clatskanie Cornucopia, Elgin Clatskanie	(2, 7) (Fischer) 1810
GLYCERIA FLUITANS (L.) R. Br. Scolecotrichum graminis Fckl.	MANNAGRASS Leaf stripe	Benton County	10,152

10,C70 (15)	(2, 7)	10,076	,	10,071 10,177	(7)	(7)10,086	10,202 1727 16.503	1229 10,120 10,120 10,666 (2, 7) (2, 7) 10,101 10,108
Portland	N.W. Creg.	Tillamook		Umpqua Valley Hoover	S.E. Cregon	Benton County	W. Cregon Coast Region Waldport and Hood River	W. Cregon Lincoln County Alsea Mts. Alsea, Tangent Coast W. Creg. Lincoln Co. N.W. Oreg.
AMERICAN MANNAGRASS Leaf stripe Smut	WEAK MAMMACRASS Crown rust	EASTERN MANNAGRASS Leaf stripe	FOUL MANNAGRES	Leaf stripe Leaf spot	SPIKE FESCUE (ey) Rust	GIANT VANTLLAGRASS (California sweetgrass) Stem rust	VELVET GRASS Tan leaf spot Ergot Parasite on rust	Twist disease Leaf mold Take-all Red leaf spot Crown rust Leaf rust White foot rot Leaf blotch Smut Stripe smut
GLYCERIA GRANDIS S. Wats. Scolecotrichum graminis Fckl. Ustilago longissima (Sow.) Tul.	GLYCERIA PAUCIFICRA Presi Puccinia coronata Corda	GLYCERIA SEPTENTRIONALIS Hitchc. Scolecotrichum graminis Fckl.	GICERIA STRIATA (Lam.) Hitchc.	Scolecotrichum Eraminis Fckl. Septoria nodorum Berk.	HESPERCCHLOA KINGII, (S.Wats.) Rydb. (FESTUCA KINGII Cassidy, F. confinis Vasey Puccinia crandellii Pam. & Hume	HIERCCHLOE CCCIDENTALIS Buckl. (Torresia macrophylla Hitchc.) Puccinia graminis Pers.	HOLCUS LANATUS L. Cercosporella holci Sprague Claviceps purpurea (Fr.) Tul. Darluca filum. (Biv.) Cast.	Dilophospora alopecuri (Fr.) Fr. Helminthosporium triseptatum Drcchs. Ophiobolus graminis Sacc. Ovularia pulchella (Ces.) Sacc. Puccinia coronata Corda P. rubigo-vera (DC.) Wint. Rhizoctonia solani Kühn Septoria tritici Rob. f. holci Sprague Tilletia holci (West.) Rostr. Ustilago striaeformis (Westd.) Niessl

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670 e/ (2, 7) e/ 10, 273	(2, 7)	(6)10,074 7559 (2,7) Fischer's coll. Herb. Univ. of Idabo (2) 7534 10,050	(W.A.F.165)d/ (6) Herb., Univ. of Idaho 10,732 (2) 10,676 10,749 (2,7)
W. Oreg. W. Creg. Lincoln & Marion Cos. Corvallis Alsea Valley Linn County Near Dallas, St. Helens	Corvallis Conroy, near Cor-	tail) Paisley Corvallis Umatilla County Baker Corvallis W. Oreg. Corvallis	Andrews Medford Benton & Union Cos. Coast Benton & Union Cos. Linn County Portland Central Point & Linn County
TWO ROW BARLEY Powdery mildew Root rot Leaf rust Stem rust White foot rot Leaf scald Covered smut	MEDITERRANEAN BARLEY Stripe rust Leaf rot	FOXTAIL BARLEY (Squirrel tar Stripe rust Leaf scald Jackson's rust WALL BARLEY (Mouse barley) Stripe rust Rust Leaf scald Smut When	MEADOW BARLEY Powdery mildew Stripe rust Stem rust Rust Leaf stripe Leaf smut Jackson's rust Smut
HORDEUM DISTICHON L. Erysiphe graminis DC. Fusarium culmorum (W.G.Sm.) Sacc. Puccinia anomala Rostr. P. graminis Pers. Rhizoctonia solani Kühn Rhynchosporium secalis (Oud.)J.J.Davis Ustilago hordei Lagerh.	HORDEUM GUSSONIANUM Parl. Puccinia glumarum (Schm.) Eriks. & Henn. Rhizoctonia solani Kühn	HCRDEUM JUBATUM L. Puccinia glumarum (Schm.) Eriks. & Henn. Rhynchosporium secalis (Oud.) J.J. Davis Uronyces jacksonii Arth. & Fromme Ustilago bullata Berk. HCRDEUM MURINUM L. Puccinia glumarum (Schm.) Eriks. & Henn. P. hordei Fckl. Rhynchosporium secalis (Oud.) J.J. Davis Ustilago bullata Berk.	HORDEUM. NODOSUM L. Erysiphe graminis DC. Puccinia glumarum (Schn.) Eriks. & Henn. P. graminis Pers. P. hordei Fckl. Scolecotrichum graminis Fckl. Urocystis agropyri (Preuss) Schroet. Uromyces jacksonii Arth. & Fromme. Ustilago bullata Berk.

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(Scribn.		•
BORGALE	. !	raminis Fok
Val		50
HORDER MODGSUM var. BOREALE (Scribn. &	Smith) Hitchc.	Scolecotrichum graminis Fckl.

HORDEUM VULGARE L.

Bacterium translucens Jones, Johnson, Reddy [Phytomonas t. Bergey et al.] Cercosporella herpotrichioides Fron P. Slumarum (Schm.) Eriks. & Henn. Fusarium culmorum (W.G.Sm.) Sacc. Helminthosporium gramineum Rabh. Claviceps purpurea (Fr.) Tul. Mycosphaerella tulashei Jacz. Ophiobolus graminis Sacc. Rhizoctonia solani Kühn Puccinia snomela Rostr. H. Sativun P. K. & B. Erysiphe graminis DC. P. graminis Pers. H. teres Sacc.

Net blotch

Root rot Strie

Leaf mold

Take-all

Rhynchosporium secalis (Oud.) J.J.Davis Wojnowicia graminis (McAlp.) Sacc. & Saptoria passerinii Sacc. Ustilago hordei Lagerh. U. nuda Rostr. D. Sacc.

Sacc. Septoria calamagrostidis (Lit.) var. koeleriae (Cocc. & Mor. KOELERIA GRISTATA (L.) Pers. Puccinia koeleriae Arth. P. monoica (Pk.) Arth.

Coularia pulchella (Ces.) Sacc. LOLIUM MARSCHALLI Stev.

Gray leaf spot

HYECRASS

Leaf spot

10,072 Ukiah NORTHERN MEADOW BARLEY Leaf stripe

(2, 6, 7) (2, 7) (10)c/g/(14) 10,020 c/ 10,111 384; 489 1); 734 1)c/ B/ 522 10,298 . 7423 Wasco & Union Cos. Corvallis, Eugene Willamette Valley Willamette Valley Coast & E.Oreg. Corvallis Corvallis Corvallis Corvallis W. Oreg. W. Oreg. Moro

Cercosporella foot rot

Powdery mildew

Ergot

Root . ot

Bacterial blight

BARLEY

Jorvellis, Pendleton Lincoln, Benton, & Lane Counties Corvallis Corvallis General General

White foot rot

Stripe rust

Stem rust

Leaf rust

(1) 10,525

1C,042

Wasco & Union Cos.

Secondary root rot

JUNEGRASS

Rust Rust

Covered smut

Leaf scald

Leaf spot

Loose smut

(11) 6/

7070

(2, 7) (7) J.R.Weir 237 Grant, Sherman, Grant County Union County

10,363 Benton & Union Cos.

Beriton County

10,241

/ 10,122	10,550	(8)	0,122	(2, 7)	14 6	10,119		/ 452	5207			10,239	0,219		10,710	10,129		10,135		2, 7)	10,240	10,040		6747	7 91	3277
W. Oreg.	W. Oreg.	te Valley	8	W. Oreg.	is & Ft.	. · · ·	Corvallis <u>E</u> ,	Benton County c	W. Creg.	(English ryegrass)		Multnomah County 10	W. Cregon 10		orvallis		20				unty	Corvallis 10	,	Linn Cos.	CONVELLIS	Corvallis
ITALIAN RYEGRASS Brown leaf spot	Chocolate spot Ergot	On Puccinia coronata Root rot	Leaf rot	Crown rust Stem rust	Leaf scald	Leaf scald	Leaf stripe	Leaf blotch	Head smut	PERENNIAL RYEGRASS (En		White leaf spot	Ercvn leaf spot		Chocolate spot	Ergot	\odot	Brown leaf scorch	Eye spot	Crown rust	Leaf scald	Leaf stripe	r c	Lear blotch	Stripe smut	NARROV SPIKED RYEGRASS Stem rust
LOLIUM MULTIFLORUM Lam. (L. italicum A. Br.) Ascochyta lolii (West.) Spr. & John. Bacterium coronafaciens atropurpureum	Reddy & Godkin [Phytomonas] Claviceps purpurea (Fr.) Tul.	Darluca filum (Biv.) Cast. Fusarium culmorum (W.G.Sm.) Sacc.	Phytophthora sp.	Puccinia coronata Corda P. graminis Pers.	Rhynchosporium orthosporum Caldwell	R. secalis (Oud.) J.J. Davis	Scolecotrichum graminis Fckl. Sentoria tritici Rob. var. lolii (Cast.)	Sprague & Johnson	Ustilago sp.	LOLIUM PERENNE L.	Ascochyta graminicola Sacc. var.	brachyodii Trail	A. lolii (West.) Sprague & Johnson	Bacterium coronafaciens atropurpureum	Reddy & Godkin [Phytomonas]	Clavicens purpurea (Fr.) Tul.	Colletotrichum graminicolum (Ces.) Wils.	Helminthosporium siccans Drechs.	Ovularia Iolii Volkart	Puccinia coronata Cda.	Rhynchosporium orthosporum Caldwell	Scolecotrichum graminis Fckl.	Septoria tritici Rob. var. lolli (Cast.)		Ustilago striaeformis (Westd.) Niessi	LCLIUM SUBULATUM Vis. Puccinia graminis Pers.

DARNEL	Chocolate spot Wallace Bridge 10,728	ONIONGRASS Leaf stripe Wellowa Mts. 10,075	ALASKA ONIONGRASS Cchoco Nat'l Forest 10,669 Lesf blast	FOXTAIL MUHLY (Hairy Muhlenbergia) Wallowa County (2, 7)	i SCRATCHGRASS	Tar spot Baker Fischer's Smut (4)	MARSH MUHLY (Satin grass) Rust (2, 7)	r INDIAN RICE GRASS (Indian millet) Rust	Selenophoma speckle Gilliam County 803 (Dana) Stem smut	BROOMCORW MILLET (Proso or hog millet)	Leaf blight Seaside 10,332 corvallis 1806	PACIFIC PANICUM Mary's Peak 9898 (Zeller)
LOTIUM TEMULENTUM L.	Bacterium coronafaciens atropurpureum Reddy & Godkin [Phytomonas]	WELICA BULBOSA Geyer (M. bella Piper) Scelecotiichum graminis Fckl.	MELICA SURULATA (Griseb.) Scribn. Cercosporella subulata Spr.	MUHLENBERGIA AMDINA 'att.) Hitchc. (M. comats Thurb.) Urcmyces minimus J.J. Davis	MUHLEWBERGIA ASPERIFORIA (Nees & Mey.) Parodi	(Sperobolus asperifolius Nees & Mey.) Phyllachora sp. Tilletia asperifolia Ell. & Év.	MUHLENBERGIA RACEMUSA (Wichx.) B.S.P. Uromyces minimus J.J. Davis	ORYZOPSIS HYMENOIDES (Roem. & Schult.) Ricker	Selenophoma denacis var. stomaticola (Bauml. Sprague and Johnson Ustilago hypodytes (Schl.) Fr.		Bacterium panici Elliott [Phytomonas p. Bergey et al.] Sphacelotheca panici-miliacei (Pers.)Bubak	PANICUM PACIFICUM Hitche. & Chase

(2, 7) 17 10,370	64 396 10,106 64 396	1731 10,744 (2,7) 7543 1694	10,683	197.	(2). (2, 7) 115
Malheur County Corvallis Astoria	Corvallis Corvallis Corvallis Corvallis	Coast Astoria, Corvallis General General	Young's Bay, Astoria Young's Bay, Astoria	SS Bergsvik Creek, Clatsop County	Hood River Hood River The Dalles
REED CANARYGRASS Rust Leaf rot Leaf spot	HARDING GRASS Leaf mold Leaf mold Rust Leaf rot Leaf rot	TIMOTHY Ergot Purple leaf spot Stem rust Leaf stripe Stripe smut	COMMON REED Rust Eye spot	NCDDING SEMAPHORE GRASS Leaf spot	BIG BLUEGRASS Bluegrass Rust Leaf rust Selenophoma speckle
PHALARIS ARUNDINACEA L. Puccinia sessilis Schneid. Phaeoseptoria sp. Septoria bromi Sacc. var. phalaricola Sprague	PHALARIS TUBEROSA var. STENOPTERA (Hack.) Hitchc. Helminthosporium sativum P.K. & B. Mycosphaerella tulasnei Jacz. Puccinia sessilis Schneid. Rhizoctonia solani Kühn Phaeoseptoria sp.	PHLEUM PRATENSE L. Claviceps purpurea (Fr.) Tul. Heterosporium phlei Gregory Puccinia graminis phlei-pratensis (Eriks. & Henn.) Stak. & Piem. Scolecotrichum graminis Fckl. Ustilago striaeformis (Westd.) Niessl	PHRACWITES COMMUNIS Trin. Puccinia phragmites (Schum.) Körn. Scolecotrichum maculicola Ell. & Kell.	PLEUROPOGON REFRACTUS (A. Gray) Benth. Ascochyta graminicola Sacc. var. brachypodii Trail	POA AMPLA Merr. Puccinia poae-sudeticae (West.)Jørstad P. rubigo-vera (DC) Wint. Selencphoma donacis var. stomaticola (Bauml.) Sprague & Johnson

8 % 1	. 8	2	9	0 6	Q
10,021 708 10,238 352 (2)	16,077	10,755 10,007 821 10,264 10,007	10,946 385	16,280 E/ 116 10,283	10,080
Corvallis Warrenton W. Oregon Alderwood St. Pk.	Wallowa Mts. Union County	Alsea Corvallis Bayview Benton County Corvallis General	General Corvallis (Pacific bluegrass)	Horse Tail Falls (Multnomah Co.) Columbia Gorge 7 mi. W. of The Dalles Columbia Gorge	
ANNUAL BLUEGRASS On Puccinia poae- sudeticae Head mold Black spot leaf smut Purple speckle Bluegrass rust Leaf spot	BOLANDER BLUEGRASS Bluegrass rust CANBY BLUEGRASS Powdery mildew	CaNADA BLUEGRASS Leaf mold On Puccinia poae- sudeticae Black spot leaf smut Leaf spot Bluegrass rust Leaf stripe	Leaf blotch Tan leaf spot SLENDER BLUEGRASS (Page	Leaf spot Powdery mildew Leaf spot Blue rrass rust	
PCA ANKULA L. Darluca filum (Biv.) Cast. Fusarium culmorum (W.G. Sm.) Sacc. Entyloma irregulare Johann. Phycomycete Indet. e/ Phycomycete Indet. e/ Procinia poae-sudeticae (West.) Jørstad Septoria macropoda Pass.	PCA BULAIDERI Vasey Puccinia pose-sudeticae (st.) Jørstad PCA CANBYI (Scribn.) Piper Erysiphe graminis DC	PCA COMPRESSA L. Cladosporium herbarum (Pers.) Lk. Darluca filum (Biv.) Cast. Entyloma crastophilum Sacc. Helminthosporium vagans Drechs. Puccinia poae-sudeticae (West.) Jørstad Scolecotrichum graminis Fckl.	(Cz. Frag.) Sprague S. oudemansii Sacc. POA GRACILLIMA Vasey (P. multnomae Piper)	Ascochyta graminicola Sacc. var. holci Sacc. Erysiphe graminis DC. Hendersonia culmicola var. intermedia Sacc. Puccinia noae-sudeticae (West.) Jórstad	

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10,229 145 10,228 10,941 Dalles 130 10,244	10,760	10,758	10,079	338 (2, 7)	718	10,696	10,102	682,789
Wasco County Near Celilo Falls Wasco County Rufus (near) 7 mi. W.of The Dall	Friend, Rufus	Jackson County	Whitman Nat'l Forest	Warrenton Newport	Friend	Sene ca; Hart Mts. Blue Mts.	Klamath County Klamath County	Near Forest Grove; East Corvallis
ALKALI BLUEGRASS Powdery mildew Leaf rot, crown rot Black spot leaf smut Leaf spot Leaf spot Bluegrass rust	Selenophoma speckle	KELLOGG BLUEGRASS Leaf spot	BOG BLUEGRASS Bluegrass rust	SEASHORE BLUEGRASS Stem rust Bluegrass rust	WREELER BLUEGRASS Leaf stripe	NEVADA BLUEGRASS Ergot : Leaf spot	FONE BLUEGRASS. Powdery mildew Bluegrass rust	KENTUCKY BLUEGRASS Brown eye leaf spot
POA JUNCIFOLIA Scribn. (P. brachyglossa Piper) Erysiphe graminis DC. Fusarium sp. Entyloma irregulare Johann. Mycosphaerella tassiana (DeNot.) Johans. Phycomycete Indet. e/ Puccinia poae-sudeticae (West.) Jørstad	Sprague & Johnson	POA KELLOGGII Vasëy Septoria macropoda Pass.	POA LEPTOCOMA Trin. Puccinia poae-sudeticae (West.) Jørstad	POA MACRANTHA Vasey Puccinia graminis Pers. P. poae-sudeticae (West.) Jørstad	POA NERVOSA (Hook.) Vasey Scolecotrichum graminis Fckl.	POA NEVADENSIS Vasey Claviceps purpurea (Fr.) Tul. Septoria macropoda Pass. var. grandis Sprague	POA PALUSTRIS L. Erysiphe graminis DC. Puccinia poae-sudeticae (West.) Jørstad	PCA PRATENSIS L. Cercosporella sp. i/

apparently not rare in Oregon but obscured by the more prevalent Septoria and Helminthosporium spots. This apparently undescribed species will be described in a subsequent publication.

W. Oregon W. Oregon Lincoln & Benton Co. 10,237 Lincoln & Benton Co. 10,201 Heppner NW. Oregon S. fork Alsea Riv. & 10,655 Irish Bend (Benton Co.) Corvallis Reaton & Linn Cos. 789		W. Uregon Corvallis, Lobster Valley	Tygh Ridge Cchoco Nat'l Forest 10,081	esert bluegrass) E. Oregon General in E. Oreg. <u>c</u> / 10,343	Astoria Astoria Corvallis	Mayer Park Wasco & Sherman Cos. 114 Mayer Park 872	Biggs 84,39
Brown patch on rust Black spot leaf smut Powdery mildew Snow mold anthrachose Leaf spot	hed leaf speckle Bluegrass rust Leaf rot Leaf spot Glume blotch & leaf	spot Leaf spot	DESERT ELUEGRASS Leaf & culm mold Tar rust	SANDBERG BLUEGRASS (Desert bluegrass) Powdery mildow E. Oregon te Leaf spot	ROUCH BLUEGRASS Leaf spot Bluegrass rust Leaf rot	VASEY'S ELUEGRASS Secondary leaf rot Powdery mildew Greasy brown spot	RABBITFOOT GRASS Powdery mildew
Corticium vagum Berk. & Curt. [C. solani] Darluca filum (Biv.) Cast. Entyloma crastophilum Sacc. Erysiphe graninis DC. Fusarium (?) nivale (Fr.) Sor. Gloeosporium graninum Rostr. Helminthosporium vagans Drechs.	Phycomycete Indet. e/ Puccinia poae-sudoticae (West.) Jørstad Rhizoctonia solani Kühn Septoria macropoda Pass. var. septulata (Gz. Frag.) Sprague	S. oudemansii Succ.	PCA SCABRELLA (Thurb.) Benth. Pleospore karstenii Berl. & Vogl. Uromyces dectylidis Otth.	PCA SECUNDA Presi (P. sandbergii Vasey) Erysiphe grominis DC. Septoria macropoda Pass. var. grandis Sprague	POA TRIVIALIS L. Helminthosporium poae Baudys Puccinia poae-sudeticae (West.) Jørstad Rhizoctonia solani Kühn	POA VASEYOCHLOA Scribn. Cladosporíum herbarum Lk. Erysiphe graminis DC. Phytophthora sp.	PCLYPOGON MCNSPELIENSIS (L.) Desf. Erysiphe graminis DC.

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PUCCINELLIA DISTANS (L.) Parl. Cladosporium herbarum Lk.	EURASIAN ALKALI GRASS Leaf mold	Klamath Falls	807
PUCCINELLIA MUTKAEMSIS (Presl) Fern. & Weath. Puccinia (?) rubigo-vera (DC.) Wint.	PACIFIC ALKALI GRASS Leaf rust	Klamath Falls	10,082
PUCCINELLIA NUTTALLIANA (Schult.) Hitchc. Puccinia rubigo-vera (DC.) Wint.	NUTTALL ALKALI GRASS (. Leaf rust	(Zawadke alkali grass) Union & Jackson Cos.	(7)
SCRIBNERIA BOLANDERI (Thurb.) Hack. Uromyces jacksonii Arth. & Fromme	SCRIBNER GRASS Jackson's rust		(2)
SECALE CEREALE L. Cercosporella herpotrichioides Fron. Claviceps purpurea (Fr.) Tul. Ervsiohe graminis DC.	RYE Cercosporella foot rot Ergot Powdery mildew	Wasco & Union Cos. Scattered	(14) 5223 5218 (1)
Fusarium culmorum (Sm.) Sacc. F. scirpi var. acuminatum (Ell. & Ev.) Wr. Helminthosporium sativum P.K. & B. Puccinia glumarum (Schn.) Eriks. & Henn.	Root rot Secondary root rot Dry land root rot Stripe rust	W. Cregon Wasco & Union Cos. Sherman County Moro	(8) c/ (6) Herb.
P. graminis Pers. P. rubiro-vera secalis (Eriks.) Carl.	Stem rust Leaf rust	Marion, Lincoln, &	(1)
Rhynchosporium secalis (Oud.) J.J.Davis	Leaf scald	Linn Counties Corvallis	(2) 259 257
Scolecotrichum graminis fokt. Tilletia sp. Wojnowicia graminis (WcAlp.) Sacc.	Stinking smut Secondary root rot	Central Morrow Co. E. Oreg. prairies	Sent to W.S.((11) <u>c</u> /
SETARIA ITALICA (L.) Beauv. Cladosporium herbarum Lk. Epicoccum purpurascens Ehrbg.	FCXTAIL MILLET Leaf mold Leaf mold	Salem Corvallis	773
SETARIA VIRIDIS (L.) Beauv.	GREEN BRISTLEGRASS		
Bacterium noici kenarick frayvomenas 11. Bergey et al.]	Leaf blight	Seaside	10,488

13,165	10,770 (2,7) 350 (2,7) 10,683	10, (7)	(2, 7). (2, 7) 10,163	1201 (15)	11	(5)	s. 10;761		1368
Klamath Falls (D.C.Smith)	tail) Mt. Hood Redmond N. Fowder (Smith) E. Cregon	Mt. Hood (Adlard) Mt. Hood Nat'l Forest	Redmond S. Cregon Wasco County	Ashlard	S. Oreg., Bugene	rass dropseed) Harney County	Long Creek, Blue Mts.	Umatilla & Sherman Counties	Crook County Umatilla County
HANSEN SQUIRRELTAIL Loose smut	SQUIRRELTAIL (Bottle brush squirreltail) Leaf spot Stripe rust Rust Leaf rest Leaf rest Leaf rest Leaf rest Leaf rest	Selenchioma spot Leaf & Sheath spot	BIG SQUIRRELTAIL Stripe rust Leaf rust Leaf stripe	SCRGHUM Head smut Kernel smut	SUDAN GRASS Kernel smut	ALKALI SACATON (Hairgrass dropseed) Rust	CCLUMBIA NEEDLEGRASS Leaf spot	NEEDLE AND THREAD Rust	Leaf stripe Stem smut
SITANION HANSENI (Scribn.) J.G.Smith Ustilago sitanii Fisch.	Sacc.	Selenchand defacts var. Someone & Johnson Sprague & Johnson S. passerinii Sacc.	SITANICN JUBATUM J. G. Smith . Puccinia glumarum (Schw.) Eriks. & Henn. P. rubigo-vera (DC.) Wint. Scolecotrichum graminis Fckl.	SORGHUM VULGARE Pers. Sorcsporium reilianum (Kühn) McAlp. Sphacelothecà sorghi (Lk.) Clinton	SONGHUM VULGARE ver. SUDAMENSE (Piper) Hitchc. Sphacelotheca sorghi (Lk.) Clinton	SPORCEGLUS AIRCIDES Torr. Puccinia luxuriosa Syd.	STIPA COLUMBIANA var. NELSCNI (Scribn.)Hitchc. Septoria stipina Diod.	STIPA COMATA Trin. & Rupr. Puccinia stipae Arth.	Scolecotrichum graminis Fckl. Ustilago hypodytes (Schl.) Fr.

TIPA OCCIDENTALIS Thurb. Ustilago hypodytes (Schl.) Fr.	WESTERN NEEDLEGRASS Stem smut	Steins Mts.	(4); (W.A.F.
			Jan 1907
RISETUM CANESCENS BUCKI. Puccinia coronata Corda	TALL DOWNY TRISETUM Crown rust	Silver Creek Falls	271
-	Stem rust	0	10,294
Septoria calamagrosticis (Lib.) Sacc.	Leal spot	Cascade Mts. & Coast Range	8678
RISETUM CERNUUM Trin.	NODDING TRISETUM		
Colletotrichum graminicolum (Ces.) Wils. Wastigosporum rubricosum (Dearn. & Barth.)	Anthracnose	Bergsvik Creek	31,8
Sprague	Red eye spot	Clatsop & Lincoln.	
Puccinia coronata.Corda	Grown rust	Lincoln, Marion	-
		and Clatsop Cos.	7536
Septoria calamagrostidis (Lib.) Sacc.	Leaf spot	Bergsvik Creek	198; 417
RITICUM AESTIVUM L. (T. valgare Vill.) Carcosporells bernotrichicides Fron	WHEAT. Cercosnopella foot not	Infon. Imatilla.	
			(14) %
Claviceps, purpurea (Fr.) . Tul.	Ergot		
Erysiphe graminis DC.	Powdery mildew	General	9909
Fusarium culmorum (W.G. Sm.) Sacc.	Root rot	W.Oreg. and Prairies	(8)
F. equiseti (Corda) Sacc.	Secondary root rot	Gene ral)
	Secondary root rot	General	\o_1
F. scirpi Lamb. & Fautr. var. acuminatum			
(Ell. & Ev.) Wr.	Secondary root rot	General	/5
Helminthosporium sativum P.K. & B.	Root rot and dry		
	land root rot	Coast & E. Oreg.	c/10,030;10,118
Mycosphaerella tulasnei Jacz.	Sooty mold		5084
Ophiobolus graminis .Sacc.	Take-all	W. Oreg., Hood Riv.	
		and Union Counties	<u>c</u> / (1) 10,027
Penicillium sp. Puccinia glumarum (Schm.) Eriks. & Henr.	(?) Seedling injury Stripe rust	Forest Grove Scattered	25,987 (2, 6, 7)
P. graminis Pers.	Stem rust	W. Oreg.	(2, 7)

$(2, 7)$ $(10)\underline{c}/10,028$ $10,005$ (1) (1) 5096 (11) $\underline{c}/$	$(14) \frac{c}{(2)}$ (2, 7) (2, 7) $(11) \frac{c}{2}$	10,726	ं जिल्ला जिल्ला जिल्ला	c/ 10,017 c/, g/	10,679	c/, B/ c/, B/ 7602
General Lincoln, Benton, & Lane Counties General General Scattered Wasco & Union Cos.	Wasco County Lincoln County Moro Wasco County Granger Wasco & Union Cos.	Benton County	Union & Wasco Cos. Union County Union & Wasco Cos.	Union & Wasco Cos. Union County	Granger	Union County Lincoln County Lincoln County Lincoln County
Leaf rust White foot rot Leaf blotch Stinking smut Loose smut Secondary root rot	ELWER Cercosporella foct rot Root rot Stripe rust Leaf rust Leaf blotch Secondary root rot	VERNAL AND KHAPLI EMMER Leaf blotch	DURUM WHEAT Cercosporella foot rot Root rot Secondary root rot	EINKORN Cercosporella foot rot Secondary root rot	PCLISH WHEAT Leaf rot and blotch	SPELT Cercosporella foot rot Root rot Foot rot Stem rust
P. rubigo-vera tritici (Eriks. & Henn.) Carl. Rhizoctonia solani Kühn Septoria tritici Rob. Tilletia foetida (Wal.) Liro T. caries (DC.) Tul. Ustilago tritici Rostr. Wojnowicia graminis (McAlp.) Sacc.	TRITICUT DICOCCUM Schrank Cercc orella herpotrichioides Fron Fusarium culmorum (W.G. Sm.) Sacc. Puccinia glumarum (Schm.) Eriks. & Henn. P. rubigo-vera tritici (Eriks. & Henn.) Carl. Septoria tritici Rob. Wojnowicia graminis (WcAlp.) Sacc. & D. Sacc.	TRITICUM DICOCCUM Schrank. var FARRUM Bayle Septoria tritici Rob.	TRITICUM DURUM Desf. Cercosporella herpotrichioides Fron Fusarium culmorum (W.G. Sm.) Sacc. Wojnowicia graminis (McAlp.) Sacc. & D. Sacc.	TRITICUM MCNCCCCCUM L. Cercosporella herpotrichioides Fron Wojnowicia graminis (McAlp.) Sacc. & D. Sacc.	TRITICUM POLCNICUM L. Mycosphaerella tulasnei Jacz.	TRITICUM SPELTA L. Cercosporella herpotrichioides Fron Fusarium culmorum (W.G. Sm.) Sacc. Helminthosporium sativum P.K. & B. Puccinia graminis Pers.

-	c/ 10,400 10,365 <u>f/</u> c/ <u>E</u> /		10,008 (8) 2/ 2/ (3) 0wens and Zundel
7611	ग्रेन भाग	10	Cos. 10,008 (8) (8) \frac{\gamma}{\gamma/\gamma} \frac{\gamma}{(3)} \frac{(3)}{2 \text{undel}}
Union, Wasco, and Lincoln Counties	Alsea Riv. Valley Lincoln County Lincoln County Lincoln County Union County	Granger	Benton & Lincoln Co W. Cregon Lincoln County Benton County Willamette Valley E. & S. Creg.
, Leaf rust	White root rot Leaf spot Loose smut Secondary root rot	POLLARD WHEAT Leaf blotch	MAIZE (Indian corn) Leaf rot Root rot Leaf blight Brown spot Head smut Smut
P. rubigo-vera tritici (Eriks. & Henn.) Carl. Leaf rust	Rhizoctonia solani Kühn Septoria nodorum Berk. S. tritici Rob. Ustilago tritici Rostr. Wojnowicia graminis (McAlp.)Sacc. & D.Sacc.	TRITICUM TURGIDUM L. Septoria tritici Rob.	ZEA MAYS L. Epicoccum neglectum Desm. (? Saprophyte) Fusarium culmorum (W. G. Sm.) Sacc. Helminthosporium turcicum Pass. Physoderma zeae-maydis Shaw Sorosporium reilianum (Kühn) McAlp. Ustilago zeae-mays (DC.) Wint.

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